

### Abstract of the Disclosure

A method of vaccinating a mammal against a disease state, comprising administering to said mammal, within an appropriate vector, a nucleotide sequence encoding an antigenic peptide associated with the disease state; additionally administering to said mammal a compound which enhances both humoral and cellular immune responses initiated by the antigenic peptide, the compound being selected from the list contained herein, wherein the compound is preferably Tucaresol or a physiologically acceptable salt or ester thereof, where appropriate.